

REMARKS

Claims 1, 3, 5 and 14 have been amended, claims 2 and 15 have been canceled and claims 22-29 have been added herein. Hence, claims 1, 3-14, and 16-29 are currently pending. Applicants respectfully request reconsideration of the present application in light of the foregoing amendments and the following remarks.

Claim Rejections - 35 USC § 102

Sections 1-2 of the office action rejected claims 1-8, 14-18 and 21 under 35 USC 102(e) as allegedly being anticipated by U.S. Patent No. 6,519,828 to Cook et al ("Cook"). Applicants respectfully traverse this rejection.

MPEP 2131 notes that, "to anticipate a claim, the reference must teach every element of the claim" and further, citing *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990), "The elements must be arranged as required by the claim."

Independent claim 1 has been amended to incorporate the subject matter of claim 1. Claim 2 has been canceled, and claims 3 and 5 have been amended to correct their dependency after the deletion of claim 2. As such, claim 1 includes

an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;
a flow sensor tube having an end received in the opening;
a filler material situated in the first segment of the opening surrounding the flow sensor tube adjacent the first side of the base member; and
the flow sensor tube being welded to the base member adjacent the second side of the base member.

Independent claim 14 has been amended to incorporate the subject matter of claim 15, which has accordingly been canceled. Thus, claim 14 includes

inserting an end of the tube into an opening extending through the base member, the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter;
situating a filler material around the tube in the first segment of the opening adjacent a first side of the base member

Independent claim 21 has been amended so it recites “the opening having first and second segments defining first and second diameters, respectively, the first diameter being greater than the second diameter....” Claim 21 further includes first and second means for attaching the tube to the base member adjacent the first and second sides.

Cook includes Figures 1-8, each illustrating a different disclosed embodiment. Regarding the filler material limitations, the office action identifies the silver coating 5 shown in the embodiment illustrated in Figure 3 of Cook. However, there is no disclosure of providing the opening shown in Figure 3 with 2 segments.

Regarding the recitations in the claims of an opening through the base member that includes 2 segments, the office action refers to “first and second segments 1, 7” and cites Figures 4-7 of Cook. However, Figure 4 of Cook shows a single bore extending through metal body 1 that does not appear to define multiple segments having different diameters. Outside and inside tapered collets 6, 7 are situated in the bore. Thus, Figure 4 does not appear to disclose such a limitation.

Figures 5-7 of Cook illustrate embodiments wherein either the inside or outside tapered collet is integrated into the metal body (*e.g.*, “the inside tapered collet 1/7 is integrated in the metal body 1....” Col. 6, ll. 45-46). However, none of the embodiments shown in Figures 5-7 include the silver coating 5, which was identified in the office action as corresponding to the

claimed filler material. To the extent that the tapered opening through the metal body 1 of Cook has 2 segments, there is no disclosure or even a suggestion of providing a filler material in the first segment.

In reference to the silver coating 5, Cook teaches that it “further strengthens the position and hold of the metal body 1 on the metal jacket 4.” Col. 6, ll. 19-20. The embodiment shown in Figure 6 does not include the metal jacket 4, so according to the teaching of Cook cited in the office action, there would be no reason to use a filler material in conjunction with that embodiment. In the embodiments shown in Figures 5 and 7, a collet 6 is situated between the metal jacket 4 and the metal body. Since the metal jacket 4 and the metal body are not contacting each other, there does not appear to be a reason to provide a filler material as taught in conjunction with the embodiment shown in Figure 3.

Moreover, each of the embodiments shown in Figures 4-7 cited in the office action show welding points 3 on each side of the metal base 1 – the same connection means is used on both sides of the metal base 1. Claim 21 recites one means for attaching the tube to the base member adjacent the first side, and a second means for attaching the tube to the base member adjacent the second side. Since Cook shows the same connection means on both sides, it appears to teach away from the claimed arrangement.

Thus, Cook fails to disclose the elements recited in claims 1, 14 and 21 arranged as required by the claims. Cook therefore cannot anticipate claims 1, 14 or 21, nor any claims dependent thereon.

Claim Rejections - 35 USC § 103

Sections 3-4 of the office action rejected claims 9-13 and 20 as allegedly being unpatentable over Cook in conjunction with other references. Claims 9-13 and 20 all ultimately depend from either claim 1 or claim 14, and are thus patentable for at least the reasons noted above.

New claims

New claims 22-29 have been added herein. Claim 22 generally represents original claim 16 in independent form. As such, claim 22 includes “swaging a second side of the base member to the tube.” Regarding original claim 16, the office action simply stated that “Cook discloses that the opening is situated at least partially in the nipple 6.” (citing Figs. 4-6 of Cook). The office action fails to identify where Cook discloses or suggests swaging any portion of the metal base to the tube. As such, new claims 22 and 23 are believed to be allowable over the references of record.

New claims 24-29 generally correspond to original claims 11-13 in independent form. Regarding original claims 11-13, the office action alleges that it would have been obvious “to include in Cook a raised boss adjacent the opening such that braze, solder or epoxy can be used to bond the tube to the base member.”

Citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), MPEP 2143.01 states,

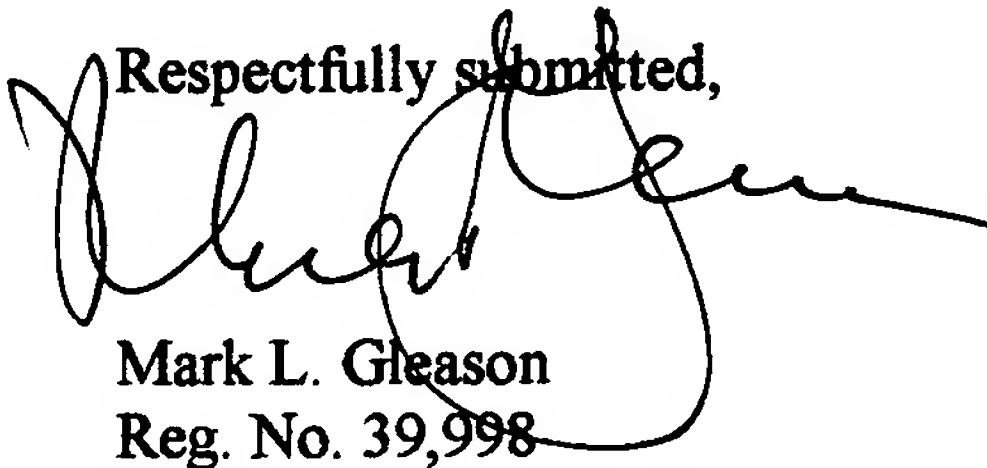
“If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.”

Cook clearly discloses welding both sides of the metal base 1 to the tube 2 at welding points 3. Since Cook teaches welding both sides of the base and does not suggest any reason to use a different connecting means on one side than the other, there would be no reason to use brazing, soldering or epoxy in the device of Cook. Further, attaching the tube of Cook to one side of the metal base by welding and attaching the tube to the other side by another connection would change the principle of operation of the device disclosed therein.

Therefore, Applicants believe new claims 24-29 are patentable over the references currently of record.

Conclusion

As evidenced by the foregoing amendments and remarks, Applicants have made a genuine effort to respond to each issue raised in the office action. All of the pending claims are believed to be proper for allowance. The Examiner is invited to contact the undersigned attorney at 952.474.3701 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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